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CLAIMS

1. Retractable system for stowing away propulsion components for a vessel of the type comprising:
- 5 a hull (1),
an engine (2) mounted within the said hull (1),
an engine drive shaft connected to a propeller shaft (3),
at least one supporting frame, and
- 10 a propeller (4),
characterised in that:
the said hull (1) has an enlarged longitudinal housing (11, 12) in the bottom thereof which is open to the exterior and which can be closed by closing means (13, 13'; 15), which in the closed position provide the said hull (1) with a bottom surface without any break in continuity,
- 15 in that the said engine drive shaft (2) passes through the said hull, acting together with sealing means (5) at a point located within the said longitudinal housing (11, 12), the said drive shaft being coupled to the said propeller shaft (3) by means of a universal joint (6) also located within the aforesaid longitudinal housing, and
- 20 in that means (7) are provided for supporting the said propeller shaft as it rotates and slides, associated with at least some extension/retraction means (8, 9, 16) mounted within the said hull (1) and intended to move the said shaft (3) and the said propeller (4)
- 25 between an extended operating position outside the said enlarged longitudinal housing (11, 12) in which the said extension/retraction means (8, 9, 16) act as a supporting frame, and a retracted storage position in which the said shaft, the said propeller and the said
- 30 extension/retraction means are stowed away and/or enclosed in the said enlarged longitudinal housing.
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2. System according to claim 1, characterised in that the said closure means (13, 13'; 15) comprise at least

one door hinged to the said hull (1) which can open to allow the said shaft (3) and the said propeller (4) to pass from its retracted position to its extended position, and vice versa.

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3. System according to claim 1 or claim 2, characterised in that one (15) of the said at least one doors (13, 13'; 15) is not hinged to the said hull (1), being independent thereof and of one piece with the
10 said means (7) supporting rotation and sliding of the said shaft (3).

4. System according to any of the preceding claims, characterised in that the interior surface of the said
15 closure means (13, 13'; 15) for the said watertight housing (11, 12) has projections (14) whose configuration is such that they reduce the free space in the said housing to a minimum when the said propeller shaft and the said propeller are in the
20 retracted condition in the said housing and the said closure means are in the closed condition.

5. System according to any of the preceding claims, characterised in that provision is made for locking
25 mechanisms designed to prevent movement of the retractable propulsion system when the latter is located in the extended condition or in the retracted condition.

30 6. System according to any of the preceding claims, characterised in that the said enlarged longitudinal housing has at least one adjustment opening to permit access to the interior.

35 7. System according to any of the preceding claims, characterised in that it is provided with safety means intended to prevent the manoeuvre of retracting the same when the vessel is being propelled by the engine.

8. System according to any of the preceding claims, characterised in that it is provided with safety means designed to prevent the propulsion components from being coupled to the engine while the said propeller shaft is in the retracted position, enclosed in the said enlarged longitudinal housing.

9. System according to any of the preceding claims, characterised in that the said closure means for the said enlarged longitudinal housing provide a watertight seal and in that they are provided with means for removing the water within the said housing in the condition in which the latter is closed.

10. Actuating, guiding and enclosing device for a retractable system for stowing away propulsion components for a vessel of the type comprising:

a hull (1; 101) provided with an enlarged longitudinal housing (2, 11; 102) to receive in a retracted condition the propulsion assembly (3, 4; 103, 104) of the vessel in such a way that the said housing (2, 11; 102) can be enclosed by means such that in the closed condition they form a surface without any break in the continuity of the said hull (1; 101),

characterized by

an articulated assembly comprising at least a first pair of upper arms (118, 118') and a second pair of lower arms (110, 110') articulated together in such a way as to form an articulated parallelogram (118, 118'; 110, 110'), this assembly being capable of moving in a vertical direction from an upper position retracted within the said hull (1; 101) in which the said articulated parallelogram is in the folded condition and a lower extended position in which the said articulated parallelogram (118, 118'; 110, 110') is in a deployed condition substantially outside the said hull (1; 101), the upper articulation (116) of the said articulated parallelogram being connected to the lower end of actuating means (9; 115) which can be moved

vertically and connected at its lower articulation (109) to the bearing (7; 105) supporting the shaft (3; 103) of the propeller (4; 104) through a coupling (107, 108) which tilts in the longitudinal plane of the vessel and of one piece with the said supporting bearing (7; 105),

guide means (112, 112') substantially in the shape of an upside-down V provided in the forward and after walls of the said part (111) of the said leaktight housing (11; 102) designed to receive and guide tenons (114, 114') which project longitudinally from the wedge-shaped members (121, 121') incorporated in the lateral articulations of the said articulated parallelogram to guide the said tenons (114, 114') during part of the descending course of the said assembly of the articulated arms (118, 118'; 110, 110') in order to cause progressive opening of the said articulated parallelogram as the said actuating means (9; 115) descend,

securing means comprising the aforesaid lateral articulation members (121, 121') each cooperating with locking members (113, 113') provided with grooves (123, 123') having a shape matching that of the said wedge-shaped members (121, 121') and of one piece with the sides of the said hull (1; 101), and

immobilizing means comprising the said upper arms (118, 118') which with the continued descent of the said actuating means (9; 115) take up an over-centred position while the said members (121, 121') provided with wedge-shaped edges (122, 122') are caused to bear tightly against the said grooves (123, 123') of the said enclosure members (113, 113'), the said lower arms (110, 110') then acting as a supporting frame for the propulsion assembly of the vessel and immobilizing it in an operating position.

11. Device according to claim 10, characterized in that the lengths of the said upper articulated arms (118, 118') are adjustable.

12. Device according to claim 10 or claim 11,
characterised in that the change from the folded
condition of the said device to the deployed condition
5 takes place keeping the said articulated arms (118,
118', 110, 110') substantially in a vertical plane
transverse to the vessel.

13. Device according to claim 10, characterised in that
10 the articulated assembly comprises only one pair of
upper arms (118, 118') and in that the supporting frame
(8, 16; 110) comprises a triangular member which is of
one piece with the bearing (7; 105) supporting the
shaft (3; 103) of the said propeller (4; 104), the said
15 supporting frame (8, 16; 110) being mounted in such a
way that it can be caused to rotate by the actuating
means about a horizontal axis (125) transverse to the
said hull (1; 101) between a condition in which it is
retracted within the said hull (1; 101) and an extended
20 condition substantially outside the same and in that
the change from the folded condition of the articulated
assembly to the deployed condition takes place in a
plane which is substantially longitudinal to the vessel
in a manner which is synchronized with the change in
25 the said supporting frame from its retracted condition
to its extended condition in order to lock it to the
latter in the operating condition of the said device.